

## Risk Dial Oct 14, 2021



Risk Dial for COVID-19 Two Rivers Public Health Published Oct 14, 2021

- 318 cases of COVID-19 were recorded in TRPHD between October 6 October 12. In the past month, a little over 300 new cases have been detected on average across TRPHD.
- Weekly COVID case counts in Buffalo county ranged between 150-225 and between 65 100 in Dawson since September 1st. However, weekly case counts seem to show an increasing trend across both counties in the past month.
- About 30% of staffed hospital beds (medical & surgical) are currently available across TRPHD. Nine patients across the district are currently being maintained on ventilator support, all COVID positive.
- Only 2 out of 28 staffed ICU beds in TRPHD are currently available, almost half of occupied beds are accounted for by COVID-positive patients.
- A newly operational testing site at the Buffalo county fairgrounds (drive-through testing with prior online registration, Mon & Wed, 9:30-12:30) will conceivably increase access to COVID testing and diagnosis in TRPHD. Those desirous of COVID testing are requested to register at <a href="https://www.trphd.org">www.trphd.org</a> for scheduling.
- Contact tracing continues to be truncated, only positive cases younger than 18 years or older than 60 are currently contacted by the case investigation team.
- As of Oct 11, 2021, 46% of TRPHD's total population and 57% of the adult population (18+ years) has been fully vaccinated across the district. See weekly vaccination report at <a href="https://www.trphd.org/covid-19/vaccination-reports.html">https://www.trphd.org/covid-19/vaccination-reports.html</a> for details. TRPHD strongly urges all unvaccinated vaccine-eligible residents to avail of the COVID vaccination through their healthcare provider, pharmacy or TRPHD. For schedule of vaccination clinics, see <a href="https://www.trphd.org">www.trphd.org</a>
- For these reasons, the risk dial is raised slightly from the previous week within the 'pandemic' zone. The risk assessment reflects persistently high disease incidence and test positivity rates, near-capacity ICU capacity, and relative seriousness of currently hospitalized COVID patients.



#### Weekly report Sep 29 - Oct 5, 2021

#### Overview

The weekly report will look at COVID-19 cases in TRPHD across different time periods, presenting graphs showing daily progress of cases and a weekly summary in conclusion

- The tables describe total tests conducted and positive cases across TRPHD from **Sep 29 Oct 12** (1 week) and **Sep 14 Oct 12** (4 weeks). We describe new cases by age, gender and county of residence. We also present weekly and monthly **test positivity rates**. We describe cases in residential facilities separately from other tests (eg: tests in hospitals, pharmacies and clinics¹)
- The first graphic describes the vaccination coverage rate of TRPHD residents by county of residence and age between Dec 15, 2020 Oct 11, 2021. All residents are included to calculate the proportion of total population partially or fully vaccinated.
- The second set of graphs look at the progress of the pandemic from April 1, 2020 Oct 12,
   2021 across all counties.
  - We describe the 7-day rolling average <sup>2</sup> of positive cases across TRPHD since April, describing overall progress and cases by age categories
- The third graph describes daily COVID tests conducted in TRPHD, further separated as positive or negative. Also shown is the **7-day rolling COVID test positivity rate.** Time considered is from **April 1, 2020 October 12, 2021**.<sup>3</sup>
- The fourth set of graphs describe the daily case average (7-day rolling) across towns and cities in three urban areas (**Kearney**, **Lexington**, **Holdrege**) (Jul 1, 2020- Oct 12, 2021) <sup>4</sup>
  - The cities described are Kearney, Elm Creek, Pleasanton, Amherst, Riverdale, Gibbon, Shelton and Axtell (total 39,412 people), Lexington, Overton, Elwood, Johnson Lake and Cozad (total 15,700 people), Holdrege, Loomis and Funk (total 5967 people).
- The fifth set of graphs describe the daily cases (7-day rolling average) from Sep 14 Oct 12.
  - o Progress is described by age & county of residence.

To conclude, 318 new COVID cases were detected in the Two Rivers area last week. Only 2 out of 28 ICU beds in the district are currently available, almost half of occupied ICU beds are accounted for by COVID positive patients. In-patient services face both increased demand and ongoing staff shortages. About a fifth of all hospital admissions in the past month were COVID positive. 46% of the total population of TRPHD district and 57% of all adults are fully vaccinated. TRPHD has scheduled mobile vaccination clinics 5 days a week at 9 different sites across the district, schedule can be found at <a href="https://www.trphd.org/covid-19/event-calendar.html">https://www.trphd.org/covid-19/event-calendar.html</a>. Those eligible are advised to contact their physician or refer to the vaccination clinic schedule. In the meantime, unvaccinated residents are advised to follow strict preventive measures (social distancing, correct and consistent masking) at all times, especially in light of increased transmission of the delta variant and general relaxation of infection control practices.

<sup>&</sup>lt;sup>1</sup> For information on residential facilities, please see appendix 3

<sup>&</sup>lt;sup>2</sup> 7-day rolling average refers to the sum of the cases reported on that day and the preceding 6 days divided by 7. This number is presented for each day to 'smooth out' the line for cases.

<sup>&</sup>lt;sup>3</sup> For information on "average positivity rate", please see appendix 2

<sup>&</sup>lt;sup>4</sup> For information on urban areas, please see appendix 5



### **Testing & Vaccination Overview**

- As of Oct 12, 2021, over 58,000 residents of Two Rivers Health District were tested at least once for COVID-19. Over 173,000 COVID tests have been conducted since March 1, 2020 and over 13,300 persons have tested positive at least once over 700 have tested COVID positive more than once.<sup>5</sup> TRPHD has publicly notified 141 deaths due to COVID-19 across the district.
- As of Oct 11, 2021, 46% of TRPHD's entire population has been fully vaccinated. <sup>6</sup> Details of vaccination rates by age in each of the seven counties in Two Rivers Health District is shown below. The legend for color codes used is also displayed. Percentages have been rounded off to the nearest whole number. Vaccines are currently available to all eligible residents aged 12 years and over.

	BUFFALO	DAWSON	FRANKLIN	GOSPER	HARLAN	KEARNEY	PHELPS	TRPHD
0-17 YRS	10%	13%	7%	8%	7%	12%	7%	10%
18-29 YRS	33%	43%	27%	35%	25%	40%	28%	35%
30-39 YRS	47%	50%	40%	31%	40%	42%	40%	46%
40-49 YRS	60%	55%	45%	43%	31%	63%	39%	55%
50-59 YRS	64%	58%	43%	44%	47%	53%	51%	58%
60-69 YRS	80%	78%	63%	71%	60%	73%	66%	75%
70-79 YRS	98%	88%	89%	56%	86%	83%	92%	91%
80+ YRS	89%	78%	77%	79%	57%	70%	73%	80%
ALL AGES	46%	47%	45%	44%	39%	46%	41%	46%

0% - 33%	Less than 1/3rd fully vaccinated
34% - 50%	1/3rd to 1/2 fully vaccinated
<b>50%- 74%</b>	1/2 to 3/4ths fully vaccinated
75% & higher	r Over 3/4ths fully vaccinated

• How to read this table: (For eg.): "60% of Buffalo county residents in their 40s are fully vaccinated, however only 31% of 40 year-olds in Harlan county are fully vaccinated. While over 90% of all TRPHD residents in their 70s are fully vaccinated, only 35% of 20-year olds in the district are fully vaccinated."

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<sup>&</sup>lt;sup>5</sup> Note: Data collection limitations (recording of different first names, alternate spellings, unrecorded or delayed antigen test results) hamper an exact count of measures like the total persons tested, or the number of distinct positive cases.

<sup>&</sup>lt;sup>6</sup> For information on vaccine-eligible population in each of the counties, please see appendix 4



- The table below provides details of positive cases detected in 7 counties in TRPHD in the past week (Oct 6 Oct 12) and past 4 weeks (Sep 14 Oct 12).
- Results are described by the site where tests were conducted, and include both antigen and PCR tests.

	Oct 6 - Oct 12 (1 week)			Sep 14 - Oct 12 (4 weeks)		
	Total	Positive	Positivity	Total	Positive	Positivity
	Tests	Results	Rate	Tests	Results	Rate
Hospital/Clinic	901	205	22.8%	3851	806	20.9%
State	5	1	20.0%	17	2	11.8%
Laboratory						
Residential	1760	9	0.5%	6948	41	0.6%
Facility						
Lab/ Pharmacy	99	11	11.1%	415	61	14.7%
Other	304	92	30.3%	1508	318	21.1%
TOTAL	3,069	318	10.4%	12,739	1,228	9.6%

• A total of 6948 tests were availed by residents and staff of long-term care and other **residential facilities** <sup>7</sup> in the last 4 weeks, and were almost all antigen tests. Details are provided below:

	Oct 6 - Oct 12 (1 week)			Sep 14 - Oct 12 (4 weeks)			
	Total	Positive	Positivity	<b>Total Tests</b>	Positive	Positivity	
Residential	Tests	Results	Rate		Results	Rate	
Facility In:							
Buffalo	597	6	1.0%	2105	19	0.9%	
Dawson	185	0	0.0%	1129	5	0.4%	
Franklin	0.0	0	0.0%	0.0	0	0.0%	
Gosper	7	0	0.0%	263	1	0.4%	
Harlan	48	0	0.0%	290	2	0.7%	
Kearney	11	0	0.0%	376	2	0.5%	
Phelps	709	2	0.3%	2272	11	0.5%	
Outside TRPHD	203	1	0.5%	513	1	0.2%	
TOTAL	1760	9	0.5%	6948	1	0.0%	

 How to read this table: (For eg.): "In the past week, over 22% of all tests conducted in hospitals and clinics across TRPHD were positive. In the past month, 11 positive COVID results were reported by residential facilities (mostly long-term living) in Phelps county, and 19 in Buffalo county."

 <sup>&</sup>lt;sup>7</sup> For information on residential facilities, please see appendix 3
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 Non-routine testing refers to tests that are <u>not</u> conducted in residential and long-term living facilities. <sup>8</sup> These COVID tests are conducted mainly in hospitals, clinics and pharmacies. Details are provided below.

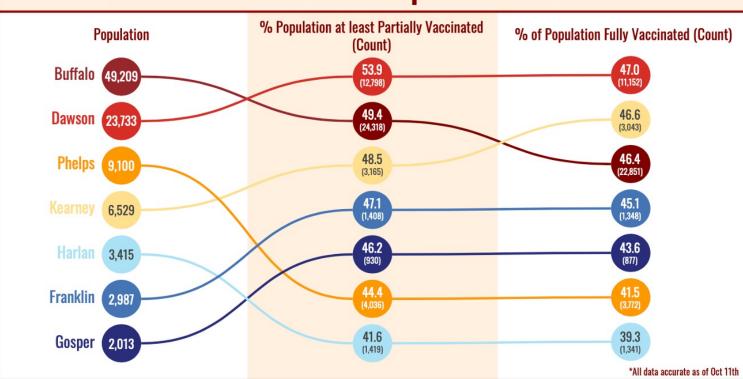
	Oct 6	- Oct 12 (1 w	reek)	Sep 14 - Oct 12 (4 weeks)		
	Total tests	Positive	P. rate	Total tests	Positive	P. rate (%)
	conducted	cases	(%)	conducted	cases	
County						
Buffalo	780	179	22.9%	3359	628	18.7%
Dawson	309	74	23.9%	1415	314	22.2%
Franklin	21	9	42.9%	79	27	34.2%
Gosper	22	7	31.8%	69	20	29.0%
Harlan	12	5	41.7%	61	12	19.7%
Kearney	41	9	22.0%	229	48	21.0%
Phelps	118	25	21.2%	553	135	24.4%
Data	6	1	16.7%	26	3	11.5%
missing/ not						
disclosed						
Total	1,309	309	23.6%	5,791	1,187	20.5%
Age (in yrs)						
0-17	281	45	16.0%	1225	219	17.9%
18-29	293	78	26.6%	1308	256	19.6%
30-39	205	53	25.9%	833	206	24.7%
40-49	141	39	27.7%	617	143	23.2%
50-59	153	39	25.5%	663	143	21.6%
60-69	113	23	20.4%	541	109	20.1%
70-79	76	19	25.0%	343	75	21.9%
80-89	47	13	27.7%	261	36	13.8%
Total	1309	309	23.6%	5,791	1187	20.5%
Gender						
Female	744	163	21.9%	3373	628	18.6%
Male	559	141	25.2%	2373	552	23.3%
Data	6	5	83.3%	45	7	15.6%
missing/ not						
disclosed						
Total	1309	309	23.6%	5,791	1,187	20.5%

 $<sup>^8</sup>$  For information on residential facilities, please see appendix 3 516 W 11  $^{th}$  Street, Suite 108 Kearney, NE 68845



- The graph below describes all TRPHD residents who are fully vaccinated against COVID-19 between December 15, 2020 October 12, 2021. All residents of the seven counties are included although the vaccine is currently available only to those 12 years or over.
- Each county is depicted by a colored circle, and the relative position of each corresponds to the proportion vaccinated. Actual numbers (count) are included in parenthesis.
- Overall, 45.7% of TRPHD's total population and 57.1% of all adult residents (18 years and over) are fully vaccinated.

# **Vaccinations of Total Population in TRPHD**





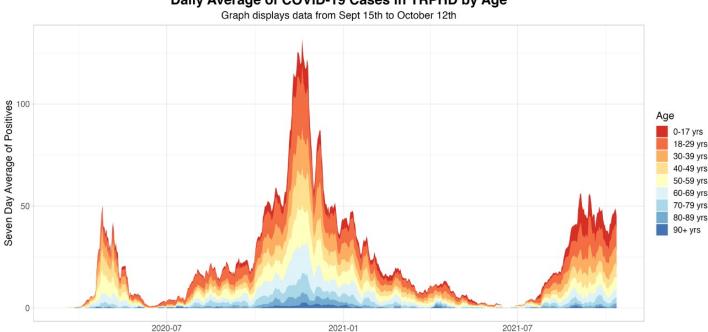
- The graph below describes 7-day rolling average of COVID-19 across TRPHD from April 1, 2020 - Oct 12, 2021.
- The second graph describes 7-day rolling average of COVID-19 cases by age across TRPHD for the same time period. The height of the graph corresponds to total cases and the thickness of each colored band corresponds to each age group.

# 7 Day Rolling Average of Two Rivers



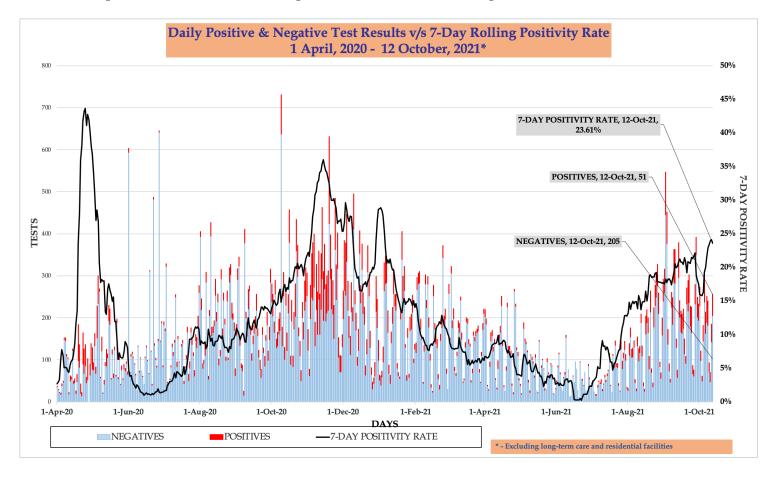


#### Daily Average of COVID-19 Cases in TRPHD by Age





- The graphs below describe the daily COVID tests in TRPHD from April 1, 2020 October 12, 2021 further divided as positive or negative. It also describes the average test positivity rate (7-day rolling average) The graph depicts the entire county, ie Buffalo, Dawson, Phelps, Franklin, Gosper, Harlan and Kearney counties.
- The height of the bar graph represents the total tests conducted on that day. The running line graph tracks 7-day positivity rate among all tests <u>except</u> those conducted **in** residential facilities in the last 17 months <sup>10</sup>.
- In the week Oct 6 Oct 12, **23.6**% **of COVID tests** outside residential facilities was positive. 51 out of 256 tests reported on 12<sup>th</sup> Oct, 2021 were positive.



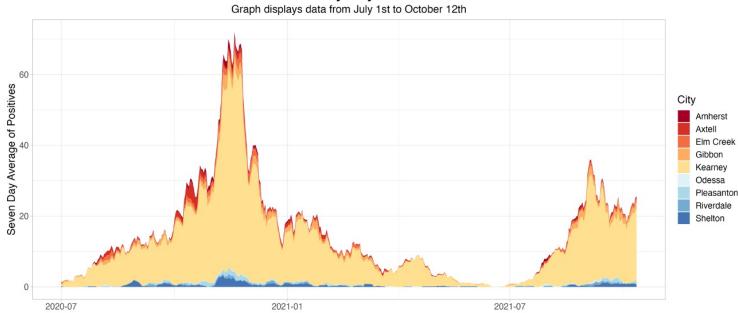
<sup>&</sup>lt;sup>9</sup> For description of average positivity rate, see appendix 1

 $<sup>^{10}</sup>$  For information on residential facilities, please see appendix 3 516 W 11  $^{\rm th}$  Street, Suite 108



- The following graphs describe the average **daily COVID cases (7-day rolling)** in three urban areas in Two Rivers Health Department.
- The urban areas are Kearney city and surrounding towns (Kearney, Elm Creek, Pleasanton, Amherst, Riverdale, Gibbon, Shelton and Axtell total 39,412 people), Lexington city and surrounding towns (Lexington, Overton, Elwood, Johnson Lake and Cozad total 15,700 people), Holdrege city and surrounding towns (Holdrege, Loomis and Funk total 5967 people). 11
- Time considered is from **July 1, 2020 Oct 12, 2021**. Scales are different for all three graphs
- The graph for Kearney city and surrounding areas is presented below.

# 7 Day Rolling Average of COVID-19 Cases by City



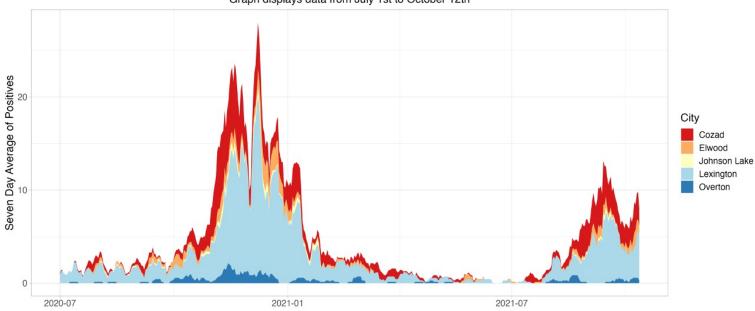
<sup>&</sup>lt;sup>11</sup> For details about each of the urban areas, please see appendix 5 516 W 11<sup>th</sup> Street, Suite 108 Kearney, NE 68845



The daily average (7-day rolling) of positive cases in Lexington and Holdrege cities and surrounding towns between July 1, 2020 - Oct 12, 2021 are presented below.

# 7 Day Rolling Average of COVID-19 Cases by City

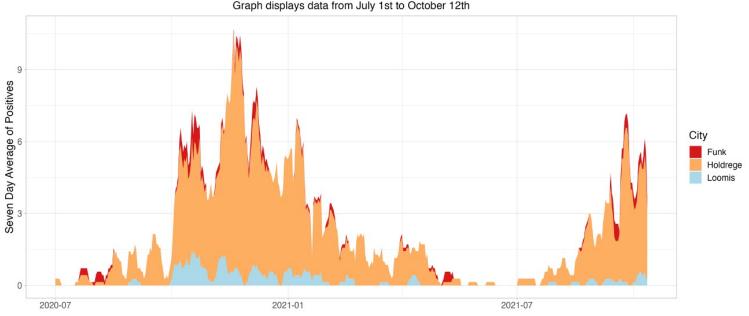
Graph displays data from July 1st to October 12th



Information Updated as of 10/12 at 8 p.m.

## 7 Day Rolling Average of COVID-19 Cases by City

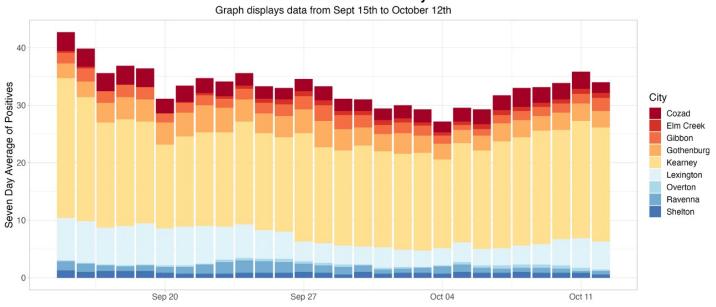
Graph displays data from July 1st to October 12th





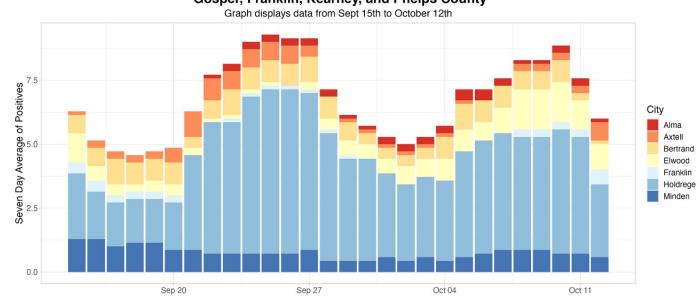
• The following bar graphs describes the 7-day rolling averages by <u>city</u> for the past four weeks (Sep 14 – Oct 12) in TRPHD. The graph above shows cities in Buffalo and Dawson counties and the one below shows the graph for cities in Gosper, Harlan, Kearney and Phelps counties. <u>The scale is different for both graphs</u>.

# 7 Day Rolling Average of COVID-19 Cases Buffalo and Dawson County



Information Updated as of 10/12 at 8 p.m.

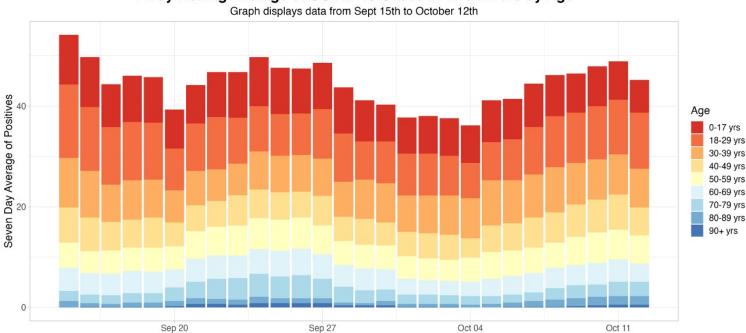
# 7 Day Rolling Average of COVID-19 Cases Gosper, Franklin, Kearney, and Phelps County





• The graph below describes the **7-day rolling average** of cases from **Sep 14 – Oct 12** by age. The height of the graph corresponds to total cases and the thickness of each colored band corresponds to each age group.

# 7 Day Rolling Average of COVID-19 Cases in Two Rivers by Age





## Weekly summary

- 318 cases of COVID-19 were recorded in TRPHD between October 6 October 12. In the past month, a little over 300 new cases have been detected on average across TRPHD.
- Weekly COVID case counts in Buffalo county ranged between 150-225 and between 65 100 in Dawson since September 1st. However, weekly case counts seem to show an increasing trend across both counties in the past month.
- About 30% of staffed hospital beds (medical & surgical) are currently available across TRPHD. Nine patients across the district are currently being maintained on ventilator support, all COVID positive.
- Only 2 out of 28 staffed ICU beds in TRPHD are currently available, almost half of occupied beds are accounted for by COVID-positive patients.
- A newly operational testing site at the Buffalo county fairgrounds (drive-through testing with prior online registration, Mon & Wed, 9:30-12:30) will increase access to COVID testing and diagnosis in TRPHD.
- Contact tracing continues to be truncated, only positive cases younger than 18 years or older than 60 are currently contacted by the case investigation team.
- As of Oct 11, 2021, 46% of TRPHD's total population and 57% of the adult population
   (18+ years) has been fully vaccinated across the district. See weekly vaccination report at
   <a href="https://www.trphd.org/covid-19/vaccination-reports.html">https://www.trphd.org/covid-19/vaccination-reports.html</a> for details. TRPHD
   strongly urges all unvaccinated vaccine-eligible residents to avail of the COVID
   vaccination through their healthcare provider, pharmacy or TRPHD. For schedule of
   vaccination clinics, see www.trphd.org
- All persons aged 12 and over are eligible for the vaccine. TRPHD has scheduled mobile vaccination clinics at over 15 sites across seven counties to distribute vaccines and to focus on areas of potential shortfall. Those eligible for the vaccine are advised to refer to the vaccination clinic schedule at www.trphd.org

To conclude, 318 new COVID cases were detected in the Two Rivers area last week. Only 2 out of 28 ICU beds in the district are currently available, almost half of occupied ICU beds are accounted for by COVID positive patients. In-patient services face both increased demand and ongoing staff shortages. About a fifth of all hospital admissions in the past month were COVID positive. 46% of the total population of TRPHD district and 57% of all adults are fully vaccinated. TRPHD has scheduled mobile vaccination clinics 5 days a week at 9 different sites across the district, schedule can be found at <a href="https://www.trphd.org/covid-19/event-calendar.html">https://www.trphd.org/covid-19/event-calendar.html</a>. Those eligible are advised to contact their physician or refer to the vaccination clinic schedule. In the meantime, unvaccinated residents are advised to follow strict preventive measures (social distancing, correct and consistent masking) at all times, especially in light of increased transmission of the delta variant and general relaxation of infection control practices.



#### **APPENDIX 1**

#### Background

The Two Rivers Public Health Department (TRPHD) covers 7 counties in central Nebraska, reaching 97,132 people who live and work in the health district spread across roughly 4663 square miles. Over three quarters of residents live in Buffalo and Dawson county, a tenth live in Phelps county, and the remaining 15% is spread somewhat comparably among the four counties of Kearney, Harlan, Franklin and Gosper in decreasing order of population. The largest cities are Holdrege (pop. 5408), Lexington (pop. 10115) and Kearney (pop. 33867) meaning that well over half the residents of TRPHD live in three cities, and over a third are in Kearney alone. The population of all 7 counties in TRPHD are shown below.

County	Population
Buffalo	49,659
Dawson	23,595
Franklin	2,979
Gosper	1,990
Harlan	3,380
Kearney	6,495
Phelps	9,034
TRPHD total	97,132
Nebraska state	1,934,408
United States	328,239,523

- Data is presented as 7-day rolling averages for daily numbers and absolute counts for cumulative cases. The 7-day rolling average is the sum of all cases reported on that day plus the previous six divided by 7.
- Total (cumulative) cases refer to all COVID cases that have been confirmed by testing in the district since the beginning of the pandemic in TRPHD (March 19)
- All tests refers to all types of tests conducted across the Health District, including laboratory-based PCR and rapid antigen.
- Average positivity rate refers to a seven-day rolling average positivity rate, which is the sum of all cases for that day and the previous six divided by the sum of all tests done in that day and the previous six. This is also the same as the "weekly positivity rate"
- In cases that call for comparison across larger areas (counties v/s state of Nebraska, for eg), we present the count per 100,000 population. 100,000 roughly corresponds to the population of Two Rivers Health District (97,132)
- In cases that call for comparison between cities, (Kearney v/s Minden for eg), we present a count per 10,000 population. 10,000 roughly corresponds to the population of Lexington (10,115), the second largest city in TRPHD.
- Deaths due to COVID-19 are identified in death certificates (usually COVID -19 is the Underlying Cause of Death) and attested by the attending physician or medical examiner/ coroner. Each case is further investigated by TRPHD over telephone - the next



of kin is contacted, condolences conveyed and exit interviews conducted by Department staff before releasing a public notification. For further details on the procedure for COVID-19 death certification, please see <a href="https://www.cdc.gov/nchs/data/nvss/vsrg/vsrg03-508.pdf">https://www.cdc.gov/nchs/data/nvss/vsrg/vsrg03-508.pdf</a>

 For calculation, we use the 2019 mid- year census estimate (American Community Survey, ACS) and data from The Atlantic's COVID tracking project (https://covidtracking.com/data)

#### **APPENDIX 2**

#### Total (cumulative) cases per 100,000 population

The total/cumulative case counts are the **total** cases confirmed by testing in an area (county, city, state or health district) calculated from the first recorded case (in case of TRPHD this is March 19, 2020). This is expressed as a fraction of the total population of the area and standardized to 100,000 persons. A population of 100,000 is used to compare counties as it is comparable to the overall population of Two Rivers Health District (97,032).

Total (cumulative) cases / 100,000 persons is calculated as:

[(Total positive test results for residents in the region)] / (mid-year population) \* 100,000 Daily average of cases per 100,000 population

The daily average (7-day rolling) of cases is the sum of all cases reported on that day plus the previous six divided by 7. This is expressed as a fraction of the total population of the area and standardized to 100,000 persons. A population of 100,000 is used to compare counties as it is comparable to the overall population of Two Rivers Health District (97,032).

Daily average of cases / 100,000 persons is calculated as:

# [(7-day rolling average of cases among residents)] / (mid-year population) \* 100,000 APPENDIX 3

About a third of all tests conducted since March in the district have been availed by residents or staff of residential facilities. "Residential facilities" include long-term care facilities, in-patient psychiatry services, retirement villages, veterans' homes and correctional facilities within Two Rivers Health District.

Considering the specific nature of COVID risk of long-term residents of institutional facilities and taking into account the frequent testing performed at facilities, we present numbers separately for long term care facilities and others in the district.



#### **APPENDIX 4**

### Vaccine-eligible population

The total COVID-19 vaccine-eligible population of Two Rivers Health District is about 76,002. This includes all residents over the age of 16 years living in the seven counties that make up the district. The table below describes the eligible population in each of the seven counties divided by age category.

	16-29 YRS	30-49 YRS	50-64 YRS	65+ YRS	TOTAL(16+ YRS)
TRPHD	19580	22863	17760	15799	76002
BUFFALO	11828	11910	8184	6863	38785
DAWSON	4301	5723	4334	3696	18054
FRANKLIN	391	586	717	809	2503
GOSPER	232	418	532	526	1708
HARLAN	459	649	735	845	2688
KEARNEY	985	1508	1343	1239	5075
PHELPS	1384	2069	1915	1821	7189

#### Vaccines used in TRPHD

In the first phase, COVID-19 vaccines have been approved for use in all persons over the age of 16 years. Currently, Pfizer and Moderna vaccine formulations are being offered in Two Rivers Health District. Use of the Johnson & Johnson (Janssen) vaccine formulation has been paused pending further scrutiny by the Food and Drug Administration (FDA).

The Nebraska Department of Health and Human Services paused use of the Johnson & Johnson (Janssen) COVID-19 vaccine after Centers for Disease Control and Prevention (CDC) and Food and Drug Administration (FDA) recommendations following reports of six women who have been hospitalized with severe blood clots after receiving the vaccine dose, including one woman in Douglas county. The women were aged between 18-48 years. Vaccine use was reinstated on April 26, 2021 and is now available at private pharmacies across the state.

To date, over 6.8 million doses of Janssen vaccine have been administered in the United States, over 31,500 in Nebraska, and 1560 in Two Rivers Health District.

Symptoms in the 6 hospitalized individuals included headache, back pain, other unexplained pain. Symptoms typically began 6-13 days after vaccination, and hospital admission was within 15 days, on average. More than 55% of the Janssen vaccine was administered before 22nd of March in Two Rivers Health District.



#### **APPENDIX 5**

#### **Methods & Definitions**

To better understand the course of the COVID-19 pandemic in Kearney, Lexington and Holdrege, we created 'urban areas' that included both the city and its surrounding towns. We included all towns within 20 miles of Kearney city, 15 miles of Lexington and 10 miles of Holdrege within each city's urban area. The respective populations of all 7 counties in TRPHD are shown below. Kearney city accounts for over third of the population of TRPHD.

County	Population
Buffalo	49,659
Dawson	23,595
Franklin	2,979
Gosper	1,990
Harlan	3,380
Kearney	6,495
Phelps	9,034
TRPHD total	97,132
Nebraska state	1,934,408

Thus "Kearney area" includes Kearney city as well as Elm Creek, Pleasanton, Amherst, Riverdale, Odessa, Gibbon, Shelton and Axtell.

The populations of cities and villages is described below. Also included are Minden and Gothenburg, used as comparison points in descriptive statistics about the area.

CITY	POPULATION
Kearney	33867
Elm Creek	949
Axtell	751
Pleasanton	359
Riverdale	179
Amherst	253
Gibbon	1869
Shelton	1055
Odessa	130
KEARNEY URBAN AREA (TOTAL)	39412
Lexington	10115
Overton	567
Johnson Lake	600

<sup>&</sup>quot;Lexington area" includes Lexington city as well as Overton, Johnson Lake and Cozad.

<sup>&</sup>quot;Holdrege area" includes Holdrege city, Loomis and Funk.



Elwood	683
Cozad	3735
LEXINGTON URBAN AREA (TOTAL)	15,700
Holdrege	5408
Funk	183
Loomis	376
HOLDREGE URBAN AREA (TOTAL)	5967
Gothenburg	3489
Minden	2890

For presenting data, we selected 3 time frames:

- a) April 1 current (From the beginning of the pandemic to most recent Tuesday)
- b) July 01 current (From the beginning of second sustained 'wave' in daily case counts to current)
- c) Previous 4 weeks
- Data is presented as 7-day rolling averages for daily numbers and absolute counts for cumulative cases. The 7-day rolling average is the sum of all cases reported on that day plus the previous six divided by 7.
- Cumulative cases refer to all cases that have been confirmed in the district since the beginning of the pandemic in TRPHD (March 19)
- Average positivity rate refers to a seven-day rolling average positivity rate, which is the sum of all cases for that day and the previous six divided by the sum of all tests done in that day and the previous six
  - Average positivity rate (in %) = (Sum of positive cases for current day + previous 6 days) / (Sum of total tests for current day + previous six days)
- In cases that call for comparison across larger areas (counties v/s state of Nebraska, for eg), we present the count per 100,000 population. 100,000 roughly corresponds to the population of Two Rivers Health District (97,132)
- In cases that call for comparison between cities, (Kearney v/s Minden for eg), we present a count per 10,000 population. 10,000 roughly corresponds to the population of Lexington (10,115), the second largest city in TRPHD.
- For calculation, we use the 2019 mid- year estimate (American Community Survey, ACS) and data from The Atlantic's COVID tracking project (<a href="https://covidtracking.com/data">https://covidtracking.com/data</a>)